



**Figure 4-40. Lack of vegetation increases potential for erosion on the left bank along the urbanized reach of Incline Creek.**

The lower urbanized reach has a greater number of streambank exposures and there are two apparent reasons. Firstly, the channel becomes progressively larger downstream until the banks are higher in places than the depth of plant roots. Secondly, removal or alterations to vegetation in the riparian zone have created short reaches where the banks have been left with inadequate root support. However these areas are infrequent making the overall fine sediment availability rating of the channel low.

### **Summary**

Grain-size analyses indicates that the bed is typically less than 1% silt and clay and, therefore, does not have a large amount of fine material available for erosion. Bank face material ranges from 0 to 13% in silt/clay content through out the entire 5.7 km assessed. However the the banks of the upper colluvial valley reach have few exposures due to typical bank heights less than 1 meter, colluvial boulders protecting the banks, and dense vegetation near the water's edge and therefore what fine sediment is in the streambanks is protected from erosion. However, narrow to non-existent floodplains do not offer a substantial riparian buffer to fine sediment eroding from the uplands (Figure 4-44 C). The lower urbanized reach has a greater number of streambank exposures. These areas, however, are infrequent making the fine-sediment availability rating of the channel low (Figure 4-41). Overall, failing reaches along the channel are few (Figure 4-44 D making the fine-sediment availability rating "low" for the majority of the channel (Figure 4-41).

Geomorphic interpretations made during the stream walk and evaluated during RGAs are further summarized spatially with maps depicting the:

- (1) combined-, channel-, and side-slope erosion indexes (Figure 4-42), and